

INDIANA DUNES NATIONAL LAKESHORE

Business Plan

**Who we are
What we do
The challenges we face**

FY 2001

TABLE OF CONTENTS

Park Introduction

| | |
|---------------------------------------|----|
| Superintendent's Foreword | 1 |
| Executive Summary | 2 |
| Park Summary Financial Analysis | 4 |
| Park Overview and Inventory..... | 5 |
| Park History | 7 |
| Park Maps | 10 |

Historical Funding Analysis

| | |
|----------------------------------|----|
| Historical Funding Analysis..... | 11 |
| Cost Drivers | 13 |

Current Financial Analysis

| | |
|--|----|
| Analysis by Functional Area | |
| Visitor Experience and Enjoyment | 15 |
| Maintenance | 18 |
| Management and Administration..... | 21 |
| Resource Protection | 23 |
| Facility Operations..... | 27 |
| GPRA Analysis | 30 |

Strategic Priorities

| | |
|---------------------------|----|
| Investments | 31 |
| Financial Strategies..... | 35 |

Superintendent's Foreword

It has been said that the National Park concept is America's greatest gift to the world. It follows then, that the idea of locating National Parks, such as the Indiana Dunes National Lakeshore, near major population centers enhances that original concept by bringing the "gift" within reach of most of our own citizens.

Indiana Dunes National Lakeshore is located approximately 50 miles southeast of Chicago, Illinois in the counties of Lake, Porter, and LaPorte in Northwest Indiana. Our urban address mistakenly leads some to the conclusion that the movement to preserve the Dunes is a new one, but the effort actually predates establishment of the National Park Service itself in 1916. In the more than 50 years that it took before the National Lakeshore was authorized, land-use decisions had already been made by politicians and businessmen for the rest of Indiana's limited shoreline, meaning that the National Lakeshore would always be smaller and more fragmented than it could or should have been. It is true that we can and do boast that this is one of the most biologically diverse ecosystems of all the National Park Service units. However, it is also true that our mission of preserving this biologically rich place is greatly complicated by the industrial, urban, and growing suburban development that surrounds and divides the National Lakeshore.

Our urban address, located within a 30-minute drive of downtown Chicago, the third-largest metropolitan area in the United States, creates other challenges as well. Two million visitors come each year and we must allow for their enjoyment in a manner that provides for their safety and for the safety and protection of the resources given into our care. In addition to being our challenge, this is also our opportunity. For many of our visitors, their experience at the National Lakeshore may be their only first-hand exposure to a unit of the National Park Service. We strive to enlighten as many of our visitors as possible through our environmental education programs and to strengthen their commitment to resource stewardship both here and nationally.

We hope that this business plan, by identifying the resources we need to help us reach our goals of preservation, education, and recreation, will help us achieve the mission that the first park advocates envisioned almost a century ago.

- Dale B. Engquist, Superintendent



Dale B. Engquist
Superintendent
1982 to present



J.R. Whitehouse
Superintendent
1970 to 1982

The mission of the Indiana Dunes National Lakeshore is to preserve the dunes and other areas of scenic, scientific, and historic interest and recreational value and to provide for educational, inspirational, and recreational use by the public so long as such use is compatible with the preservation of the park's unique flora, fauna, and physical geographic conditions and its historic sites and structures.

Executive Summary

Indiana Dunes National Lakeshore has utilized the Business Plan Initiative as an opportunity to analyze its mission goals and the resources that were expended in fiscal year 2000 toward achievement of these goals. These mission goals must also meet the operational standards of the National Park Service (NPS). The National Lakeshore pledges to preserve park resources, provide for public enjoyment as well as safety, establish formal partnership programs to enhance mission capabilities, and provide an effective and efficient work force. Consultants assisted Indiana Dunes National Lakeshore staff in identifying formal standards for all operations, helped assess current performance against these standards, and identified funding shortfalls that may preclude the National Lakeshore from reaching these accepted standards. The shortfalls identified across program areas have now become statements of need that can be articulated and supported in dealing with stakeholders and partners. The Business Plan will help the National Lakeshore develop a strategy to address funding needs and to meet the challenges of the 21st century.

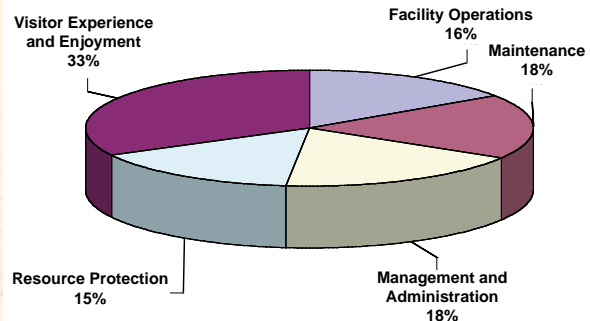
Historical Analysis

In 1980 the base budget for Indiana Dunes National Lakeshore was \$2,876,300. In fiscal year 2001 that figure had risen to \$6,751,000. When adjusted for inflation during that same period, the base budget for the National Lakeshore only increased from \$2,876,000 to \$3,230,440 or approximately 12.3%. During the same timeframe, the National Lakeshore's acreage increased by 17% and the infrastructure operated and maintained by park staff increased in square feet by 57%, while electricity and gas expenses increased nearly 70%. In addition, new National Lakeshore federal and NPS responsibilities and mandates have increased the demand on existing park resources.

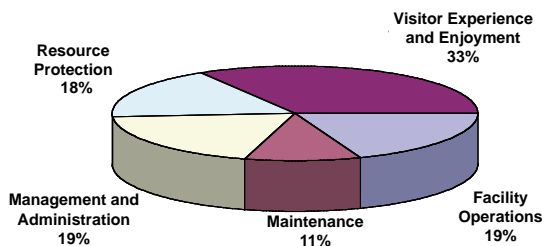
Current Financial Analysis

The Business Plan process organizes all National Lakeshore activities within five functional areas: Resource Protection, Visitor Experience and Enjoyment, Facility Operations, Maintenance, and Management and Administration.

FY2000 Available Resources by Functional Area



FY 2000 Available FTE by Functional Area



This requires total operational dollars of \$13,781,689 versus a budget of \$6,751,000.

When current allocations are compared to this operational need, the total deficit is \$5,210,030. The chart at the left shows the distribution of deficit funding.

Strategic Priorities

Increased Congressional appropriations are only one method of reducing the gap between what is required and what is currently available at the National Lakeshore. Alternative and creative methods of improving the National Lakeshore's ability to meet its operational deficits are required. A variety of financial and non-financial strategies are currently employed, yet more strategic planning must be done to ensure that the National Lakeshore can achieve its goals. Current efficiencies and cost savings are discussed in this document, as well as opportunities to increase operational efficiency, build additional capacity, expand partnership opportunities, increase volunteerism, increase revenue from fee collections, and attract additional quality staff beyond current methods.



Park Docent Ramona Ambrozich leading education program.



Chesterton High School Environmental Education Classes led by teacher Bill Schaudt

| | REQUIRED RESOURCES | | RESOURCES AVAILABLE | | DEFICIT (SURPLUS) | |
|--|--------------------|--------------|---------------------|--------------|-------------------|-------------|
| | FTE | \$ | FTE Available | Total | FTE | \$ |
| FACILITY OPERATIONS | | | | | | |
| Buildings Operations | 3.30 | \$ 141,671 | 0.80 | \$ 42,574 | 2.50 | \$ 99,098 |
| Buildings Operations: Historic Structures Operations | 1.66 | \$ 58,549 | 0.60 | \$ 19,438 | 1.06 | \$ 39,503 |
| Campground Operations | 2.20 | \$ 88,834 | 2.79 | \$ 104,475 | -0.59 | \$ (15,640) |
| Facility Operations Management and Administration | 2.75 | \$ 197,171 | 2.34 | \$ 147,863 | 0.41 | \$ 49,308 |
| Grounds Operations | 7.96 | \$ 362,513 | 6.17 | \$ 266,754 | 1.79 | \$ 95,759 |
| Janitorial Operations | 5.76 | \$ 251,844 | 5.47 | \$ 202,447 | 0.29 | \$ 49,396 |
| Roads Operations | 4.20 | \$ 246,117 | 2.84 | \$ 160,559 | 1.36 | \$ 85,558 |
| Trails Operations | 3.00 | \$ 149,738 | 0.80 | \$ 37,750 | 2.20 | \$ 111,988 |
| Transportation Systems Operations | 2.40 | \$ 272,386 | 1.65 | \$ 162,249 | 0.75 | \$ 110,138 |
| Utility Operations | 5.58 | \$ 365,462 | 3.36 | \$ 216,881 | 2.22 | \$ 148,581 |
| | 38.81 | \$2,134,287 | 26.82 | \$1,360,990 | 11.99 | \$773,691 |
| MAINTENANCE | | | | | | |
| Buildings Maintenance | 4.15 | \$ 308,021 | 0.92 | \$ 79,650 | 3.23 | \$ 228,371 |
| Buildings Maintenance: Historic Structures Maintenance | 2.63 | \$ 273,341 | 2.56 | \$ 298,527 | 0.07 | \$ (25,186) |
| Fleet Maintenance | 0.60 | \$ 79,413 | 0.50 | \$ 56,747 | 0.10 | \$ 22,666 |
| Maintenance Management and Administration | 2.23 | \$ 370,998 | 1.42 | \$ 108,784 | 0.81 | \$ 262,214 |
| Maintenance Management and Administration: Maintenance Planning | 2.53 | \$ 106,031 | 2.08 | \$ 202,357 | 0.45 | \$ (96,326) |
| Roads Maintenance | 1.45 | \$ 212,191 | 0.70 | \$ 101,126 | 0.75 | \$ 111,064 |
| Trails Maintenance | 2.48 | \$ 310,730 | 2.17 | \$ 293,330 | 0.31 | \$ 17,400 |
| Utility Maintenance | 6.11 | \$ 537,480 | 4.43 | \$ 425,762 | 1.68 | \$ 111,719 |
| Total Maintenance | 22.18 | \$2,198,205 | 14.79 | \$1,566,282 | 7.39 | \$631,922 |
| MANAGEMENT AND ADMINISTRATION | | | | | | |
| Communications: IT, Telephone and Mail | 3.68 | \$ 333,462 | 2.97 | \$ 220,051 | 0.71 | \$ 113,410 |
| Communications: Radio and Dispatch | 7.41 | \$ 219,536 | 7.49 | \$ 188,302 | -0.08 | \$ 31,234 |
| External Affairs: Domestic | 3.21 | \$ 239,010 | 1.68 | \$ 110,329 | 1.53 | \$ 128,681 |
| External Affairs: International | 0.15 | \$ 14,360 | 0.14 | \$ 18,859 | 0.02 | \$ (4,499) |
| Financial Management | 3.42 | \$ 200,673 | 2.02 | \$ 122,492 | 1.40 | \$ 78,181 |
| General Administration: Contracts/Procurement | 3.61 | \$ 202,359 | 2.91 | \$ 170,602 | 0.70 | \$ 31,757 |
| General Administration: Volunteers in Parks | 0.48 | \$ 27,432 | 0.32 | \$ 27,099 | 0.16 | \$ 11,215 |
| General Management: Human Resources | 4.00 | \$ 285,019 | 2.59 | \$ 170,838 | 1.42 | \$ 114,181 |
| General Management: Park Leadership | 4.53 | \$ 390,752 | 2.93 | \$ 241,439 | 1.60 | \$ 149,313 |
| General Management: Reservations of Use | 1.85 | \$ 139,151 | 1.93 | \$ 143,781 | -0.07 | \$ (4,630) |
| Parkwide Safety | 0.98 | \$ 74,196 | 0.50 | \$ 40,000 | 0.48 | \$ 34,195 |
| Planning | 1.76 | \$ 174,448 | 1.64 | \$ 139,783 | 0.11 | \$ 34,665 |
| Total Management and Administration | 35.10 | \$2,300,398 | 27.13 | \$1,593,576 | 7.97 | \$717,704 |
| RESOURCE PROTECTION | | | | | | |
| Cultural Resource Management: Architectural | 2.45 | \$ 173,274 | 0.99 | \$ 57,612 | 1.46 | \$ 115,662 |
| Cultural Resource Management: Historical | 3.28 | \$ 193,067 | 1.25 | \$ 71,878 | 2.02 | \$ 121,190 |
| Information Integration and Analysis | 1.23 | \$ 70,450 | 1.07 | \$ 63,973 | 0.16 | \$ 6,477 |
| Natural Resource Management: Environmental Monitoring | 1.71 | \$ 83,379 | 1.41 | \$ 61,106 | 0.31 | \$ 22,273 |
| Natural Resource Management: Fire Management | 26.09 | \$ 1,298,260 | 10.37 | \$ 497,797 | 15.72 | \$ 800,463 |
| Natural Resource Management: Restoration/Vegetation Management | 11.47 | \$ 558,282 | 3.46 | \$ 261,235 | 8.01 | \$ 443,722 |
| Natural Resource Management: Wildlife | 3.48 | \$ 201,789 | 1.64 | \$ 95,692 | 1.84 | \$ 106,097 |
| Resource Protection Management and Administration | 10.49 | \$ 689,348 | 4.65 | \$ 230,172 | 5.85 | \$ 459,177 |
| Resource Protection Total | 60.22 | \$3,267,850 | 24.85 | \$1,339,465 | 35.37 | \$2,075,061 |
| VISITOR EXPERIENCE AND ENJOYMENT | | | | | | |
| Concessions Management | 0.04 | \$ 3,326 | 0.03 | \$ 1,146 | 0.01 | \$ 2,180 |
| Cooperating Association Coordination | 0.63 | \$ 24,167 | 0.28 | \$ 14,139 | 0.34 | \$ 10,028 |
| Environmental Education | 9.15 | \$ 803,076 | 7.30 | \$ 519,513 | 1.85 | \$ 283,564 |
| Fee Collection | 5.04 | \$ 184,303 | 2.83 | \$ 103,142 | 2.21 | \$ 81,161 |
| Interpretation: Interpretive Media | 1.70 | \$ 133,998 | 0.57 | \$ 44,585 | 1.13 | \$ 89,413 |
| Interpretation: Interpretative Programs | 5.48 | \$ 259,158 | 5.22 | \$ 203,652 | 0.26 | \$ 55,508 |
| VEE Management and Administration: Interpretation | 5.28 | \$ 305,948 | 4.42 | \$ 290,539 | 0.86 | \$ 15,408 |
| VEE Management and Administration: Visitor Protection | 4.41 | \$ 289,746 | 4.59 | \$ 254,497 | -0.18 | \$ 35,249 |
| Visitor Center Operations | 6.34 | \$ 244,293 | 5.27 | \$ 220,526 | 1.06 | \$ 23,766 |
| Visitor Safety Services | 19.50 | \$ 1,632,934 | 16.73 | \$ 1,217,500 | 2.77 | \$ 415,434 |
| Total Visitor Experience and Enjoyment | 57.57 | \$3,880,950 | 47.24 | \$2,869,238 | 10.33 | \$1,011,712 |
| SUBTOTAL | 213.87 | \$13,781,689 | 140.82 | \$8,729,552 | 73.05 | \$5,210,090 |
| OFS INCREASE FY2000 to FY2001 (after regional adjustments) | | | | | \$182,900 | |
| EFFECTIVE FY2001 DEFICIT/(SURPLUS) | | | | | \$5,027,190 | |
| Note: Basis of Accounting | | | | | | |
| This financial statement has been prepared from the books and records of the National Park Service in accordance with NPS accounting policies. The resources available reflect the total operations and maintenance costs incurred by the park during the fiscal year 2000. The resources required are intended to represent the funding needed to operate the park while fully meeting park defined operational standards. Program requirements are presented as a planning tool based on fiscal year 2001 salary and wage tables. Non-labor operating costs were determined as a percentage of salary costs. One-time projects and capital improvements (e.g. investments) will have a resulting impact on the operational requirements presented. | | | | | | |
| Yellow shaded area under fire management indicates a funding increase in FY 2001 of 7.1 FTE and \$496,470. | | | | | | |

Park Overview

During the Ice Age, environments collided and deposited their remnants at Indiana Dunes National Lakeshore. The resulting ecosystem is a unique combination of plants. Arctic bearberry grows next to prickly pear cactus, and southern dogwoods grow just over the dune from northern jack pines. Ponds are scattered among younger dunes; marshes appear on the fringes



of old lake bottoms between long dune ridges; sphagnum bogs, with their unusual environment and vegetation, are tucked in glacial moraine. These bogs and marshes will eventually become meadows, then forests.

Interpretive programs and marked trails provided by Indiana Dunes National Lakeshore demonstrate this variety of ecosystems. Programs include guided tours to Pinhook Bog, formed from an ice chunk marooned by the retreating glacier some 14,000 years ago. Sphagnum moss and unusual vegetation from deciduous evergreens now fills Pinhook Bog, as well as insect-eating plants and delicate orchids. Trails surround the Heron Rookery, where flocks of herons roost every year. The park also includes Hoosier Prairie, the largest tract of ancient prairie in Indiana. The dunelands of southern Lake Michigan are renowned for stretches of uncrowded beaches and towering dunes created when wind blowing off Lake Michigan lifts grains of sand and transports them inland.



In addition to its natural history, the National Lakeshore is the site of varied cultural history as well, beginning with the Native Americans who traveled the dunes along major routes between the Great Lakes and the Mississippi River. The Bailly Homestead, built by Joseph Bailly in 1822, established a trading post along the Calumet River. The post exchanged blankets and guns for furs supplied by the Miami and Potawatomi trappers and voyageurs. Chellberg Farm, begun in 1872 by Swedish immigrants and farmed for over a century, provides a picture of early agriculture.

This unusual and rich natural variety and history could easily have been lost in a rapidly growing industrial area, had many not fought a long battle to establish and preserve the Indiana Dunes National Lakeshore.



Park Inventory

Natural Resources:

15,000 Acres of Land

1460 Vascular Plant Species, including
130 Endangered, Threatened, and
Rare Plant Species, and
290 Exotic Plant Species

37 Mammals

27 Reptiles

18 Amphibians

352 Birds with
approximately 113 regular
nesters

61 Butterflies, including one federally
designated endangered species



Cultural Resources:

204 Archaeological Sites
6 Historical Trails
66,596 Museum Collection Items
56 Historical Buildings
5 Cultural Landscapes
12 Historic Railroad Beds
18 Historic Railroad Cars

Roads and Trails:

60.45 Lane-Miles of Paved Roads
0.46 Lane-Miles of Unpaved Secondary Roads
19 Paved Parking Areas and Scenic Viewpoints
17 Unpaved Parking Areas and Scenic Viewpoints
15,000 Linear-Feet of Boardwalk
45 Miles of Trails

Utilities:

12 Remote Comfort Stations
30 Water Systems, Septic Tank Treatment Systems
11 Picnic Areas
2 Fuel Storage Systems
1 Campground with RV Parking and Tent Pads
13 Lift Stations

Buildings:

1 Visitor Center and 2 Visitor Contact Facilities
1 Headquarters Complex
26 Administrative Facilities

50 Visitor-Use Facilities
1 Day-Use and Overnight Environmental Learning Center
1 Storage Facility
1 Major Beach Facility
5 Housing Units and 3 Dormitories
3 Fire Caches
1 Automotive Shop
1 Amphitheater

Human Resources:

125 Full-time Employees
4 Part-time Employees
50 Temporary Employees

Fleet and Equipment:

215 Vehicles, including light and heavy equipment



Park History

The legislation that authorized Indiana Dunes National Lakeshore in 1966 resulted from a movement that began in 1899. Three key individuals helped make Indiana Dunes National Lakeshore a reality: Henry Cowles, a botanist from the University of Chicago; Paul H. Douglas, Senator for the State of Illinois; and Dorothy R. Buell, an Ogden Dunes resident and English teacher. Henry Cowles published an article entitled "Ecological Relations of the Vegetation on Sand Dunes of Lake Michigan," in the *Botanical Gazette* in 1899 that established Cowles as the "father of plant ecology" in North America and brought international attention to the intricate ecosystems existing on the dunes.

But Cowles' article and the new international awareness were not enough to curtail the struggle between industry and preservation that governed the development of Indiana Dunes National Lakeshore. In 1916, the region was booming with industry in the form of steel mills and power plants. Hoosier Slide, for example, 200 feet in height, was the largest sand dune on Indiana's lakeshore. During the first twenty years of the battle to save the dunes, the Ball Brothers of Muncie, Indiana, manufacturers of glass fruit jars, and the Pittsburgh Plate Glass Company of Kokomo carried Hoosier Slide away in railroad boxcars.

It was this kind of activity by local industry that spurred Cowles, along with Thomas W. Allinson and Jens Jensen to form the Prairie Club of Chicago in 1908. The Prairie Club was the first group to propose that a portion of the Indiana Dunes be protected from commercial interests and maintained in its pristine condition for the enjoyment of the people. Out of the Prairie Club of Chicago came the precursor to the current park: The National Dunes Park Association (NDPA). The NDPA promoted the theme: "A National Park for the Middle West, and all the Middle West for a National Park."



On October 30, 1916, only one month after the National Park Service itself was established (August 25, 1916), Stephen Mather, the Service's first Director, (shown at the far left in the adjacent photo leading a tour of park advocates in the dunes in 1916) held hearings in Chicago to gauge public sentiment on a "Sand Dunes National Park". Four hundred people attended and 42 people, including Henry Cowles, spoke in favor of the park proposal; there were no opponents.

The battle for a national park was crippled, however, when the United States entered the First World War. National priorities changed and revenues were targeted for national defense, not the development of a national park. The popular slogan "Save the Dunes!" became "First Save the Country, Then Save the Dunes!" As the nation went from a world war into a depression, hopes to save the dunes began to fade.

In 1926, after a ten-year petition by the State of Indiana to preserve the dunes, the Indiana Dunes State Park opened to the public. The State Park was still relatively small in size and scope and the push for a national park continued. In 1949, Dorothy Buell became involved with the Indiana Dunes Preservation Council (IDPC). The efforts of Buell resulted in a Save the Dunes Council in 1952.

However, the struggle did not end there. A union of politicians and businessmen desired to maximize economic development by obtaining federal funds to construct a "Port of Indiana." Hoosier politicians and businessmen were eager to exploit the economic prosperity promised by linking the Great Lakes to the Atlantic Ocean shipping lanes via the St. Lawrence Seaway. In light of this, Save the Dunes Council President Dorothy Buell and council members began a nationwide membership and fund-raising drive to buy the land they desperately sought to preserve. Their first success was the purchase of 56 acres in Porter County, the Cowles Tamarack Bog.

In the summer of 1961, those fighting to save the dunes began to see greater possibilities for hope. Then-President John F. Kennedy supported congressional authorization for Cape Cod National Seashore in Massachusetts, which marked the first time federal monies would be used to purchase natural parkland. President Kennedy also took a stand on the National Lakeshore, outlining a program to link the nation's economic vitality to a movement for conservation of the natural environment. This program became known as *The Kennedy Compromise, 1963-1964*.

The Kennedy Compromise entailed the creation of a national lakeshore and a port to satisfy industrial needs. Then-Illinois Senator Paul H. Douglas (shown in adjacent photograph) spoke tirelessly to the public and Congress in a drive to save the dunes, earning him the title of "the third senator from Indiana." In 1966, Douglas made sure that the highly desired Burns Waterway Harbor (Port of Indiana) could only come with the authorization of the Indiana Dunes National Lakeshore.



By the time the 89th Congress adjourned in late 1966, the bill had passed and the Indiana Dunes National Lakeshore finally became a reality. While the 1966 authorizing legislation included only 8,330 acres of land and water, the Save the Dunes Council, National Park Service, and others continued to seek expansion of the boundaries of preservation. Four subsequent expansion bills for the park (1976, 1980, 1986, and 1992) have increased the size of the park to more than 15,000 acres.

Milestones

| | |
|------------------|---|
| Nov. 5, 1966 | President Johnson signs bill to authorize INDU (P.L. 89-761). |
| 1969 | First summer visitor season; boaters at WB |
| 1970-1983 | First superintendent JR Whitehouse |
| 1972 | Bailly Homestead and Chellberg Farm acquired. |
| Sept 1972 | Sec. of Int. and Mrs. Julie Nixon Eisenhower dedicate the National Lakeshore |
| 1973 - | Mt. Baldy, Central Avenue and East State Park (Kemil) Road parking areas opened. |
| mid 1970s | Bailly nuclear debate |
| 1974 | U.S. Army Corps of Engineers (USACOE) constructed first beach nourishment at Mt. Baldy (total 227, 000 cu. yd. or 305,100 tons). Also rebuilt portions of Lake Front Drive and constructed the Beverly Shores rock revetment |
| 1976 - | Congress passed legislation expanding lakeshore boundaries primarily in the West Unit and Heron Rookery (P.L. 94-549). |
| 1977 | Nike base is transformed into park headquarters. |
| 1977 - | First Duneland Folk Festival, predecessor to Duneland Harvest Festival. |
| May 21, 1977 | West Beach Bathhouse is dedicated. |
| 1979 - | First Maple Sugar Time program at Bailly/Chellberg. |
| Oct. 1979 | West Beach bathhouse opens |
| 1980 - | Congress passed legislation further expanding park, principally to accommodate redevelopment plans (P.L. 96-612). |
| 1981 | U.S. Army Corps of Engineers (USACOE) constructed 2nd beach nourishment at Mt. Baldy (80,000 cu. yd. or 108,000 tons). |
| 1982 - | U.S. Army Corps of Engineers (USACOE) completed its final feasibility report and Environmental Impact Statement on Indiana shoreline erosion. |
| 1982 - | Friends of Indiana Dunes National Lakeshore established. |
| 1983-present | Dale Engquist becomes superintendent |
| 1984 - | Acquisition of 19 historic SSRR cars with a contract let to begin restoration of one car. |
| Sept. 14, 1986 - | Paul H. Douglas Center for Environmental Education dedicated and opened for public. |
| 1986 - | Congress passed legislation further expanding park boundaries (P.L. 99-583). |
| 1989 - | Construction completed on new Lake View facility that opened for public use for the summer. |
| 1991 - | Park celebrated its 25th Anniversary and the 75th Anniversary of the National Park Service. |
| 1992 - | Indiana Dunes National Lakeshore was officially dedicated in honor of Senator Paul H. Douglas by Senator Paul Simon of Illinois. |
| 1992 - | Congress passed Public Law 102-430 adding Inland Manor, Fadell Dunes, Hobart Prairie Grove, Gaylord Prairie. |
| 1993 - | The park's visitor center was officially dedicated as the "Dorothy Buell Memorial Visitor Center" in recognition of Mrs. Buell's contributions to the establishment of the national lakeshore |
| 1995 - | The IHB Hike/Bike trail was completed and a dedication ceremony was conducted on June 2. Phase 1 of the trail from County Line Road west to Montgomery street was officially opened to the public. Phase 2, Montgomery to Grand Blvd., was completed August 1, 1995. |
| 1996 - | U.S. Army Corps of Engineers (USACOE) constructed 3rd Mt. Baldy beach nourishment (53,1000 cu. yd.). In addition, 50,000 cu. yd. was placed by pipeline from hydraulic dredging of the outer harbor at Michigan City. |
| 1998, Jan. - | The National Lakeshore entered into a Cooperative Agreement with the newly formed Indiana Dunes Environmental education Consortium (later to be renamed the Indiana Dunes Environmental Learning Center, IDELC) the park's private partner for operating the IDELC at Camp Good Fellow. |
| 1998, Apr. 15 - | Superintendent Dale B. Engquist and Dyrektor Jerzy Misiak of Kampinoski National Park signed a Sister Park Agreement. |
| 1998, Oct. - | The first phase of construction of the IDELC at Camp Good Fellow opened for use. The first phase consisted of 5 cabins and a multipurpose building. |

Park Map

Indiana Dunes National Lakeshore is located in northwest Indiana, approximately 50 miles southeast of Chicago. The park's proximity to the third largest metropolitan area in the U.S. puts it in a unique position. The park does not experience the easy access and visibility of a park within a city's borders, but it does serve an annual average of 1,840,000 visitors from the greater Chicago area, an area that ranges from the Wisconsin–Illinois state line around the southern tip of Lake Michigan to the Indiana–Michigan state line and includes eight-million people. Because the lakeshore is located in Indiana, foundations in the state of Illinois are reluctant donors. However, because the park serves many visitors from the Chicago area, foundations in Indiana can be reluctant as well.



Historic Funding Analysis

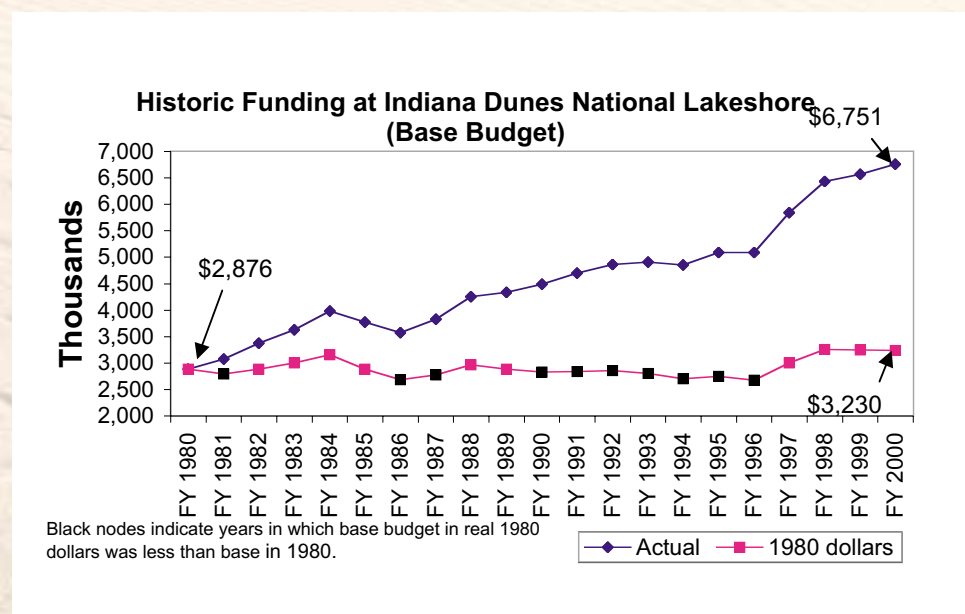
The base budget for Indiana Dunes National Lakeshore appears to have increased by 135% from 1980 to 2000 (from \$2,876,000 to \$6,751,000). However, adjusting those actual dollars for inflation shows that in the past 20 years Indiana Dunes National Lakeshore has realized an effective increase in base budget of only 12.3% (from \$2,876,000 to \$3,230,000 in 1980 dollars). As illustrated in the graph below, for half of those years, including all of the years 1990-1996, the adjusted base budget was effectively less than in 1980.

Meanwhile, the National Lakeshore's acreage has continued to grow even as the operating budget stagnated over the past two decades, increasing by 17% from 12,535 to 15,100 acres. Increased acreage results in greater personnel demands for resource protection and monitoring. The National Lakeshore has also experienced dramatic increases in infrastructure. The square footage maintained by the National Lakeshore increased 238% from 67,755 to 160,444. Such increases in infrastructure have greatly contributed to the operating costs of the National Lakeshore by increasing electricity cost by 70% and natural gas for heating an additional 68%.

The National Lakeshore welcomes the increase in acreage in our effort to preserve the dunes. Yet the increase in acreage and infrastructure also burden every division of the National Lakeshore; park staff must patrol more land, interact positively with more former land- and home-owners, assess more structures for historical significance and then either have them demolished or maintained, and restore greater amounts of natural resources.

A persistent funding shortfall therefore affects the ability of the National Lakeshore to meet its mission.

When fiscal year 2000 figures are analyzed, National Lakeshore salary and benefits combined equal 71.4% of the total expenditures. The "Other Services" category amounts to 16% of the next highest expenditure. This category includes contracts for goods and services such as trash collection, environmental





consulting, roofing and other repair or service contracts, and similar activities. For the National Lakeshore, this "Other Services" category also includes contracts for annual demolition of deteriorating properties. These structures are on property purchased by the National Lakeshore and are often leased back to the seller as a "Reservation of Use". The National Lakeshore manages the largest Reservation of Use (ROU) program in the National Park Service, resulting in a significant expense due to the demolition cost. However, ROU's also serve as a source of revenue

from the lease payments made by occupants to the National Lakeshore. More than 400 structures within Indiana Dunes National Lakeshore's borders are a part of this arrangement.

Cost Drivers

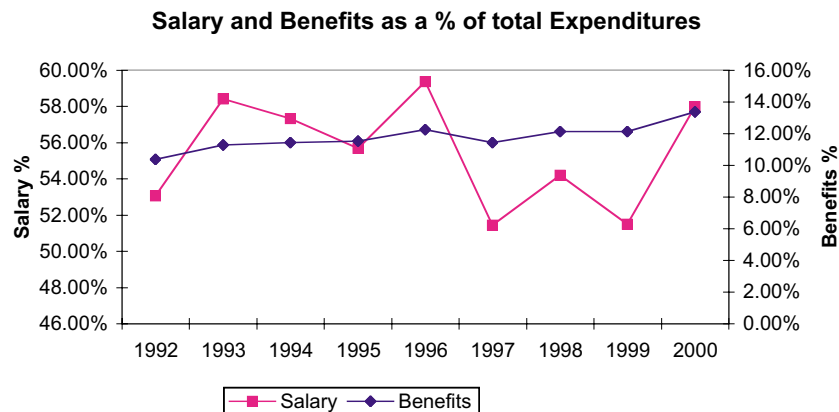
Congressional and National Park Service Mandates

As illustrated in the graph below, payroll benefits expenditures have been increasing at a greater rate than salaries. These increasing personnel costs are due in large part to actions taken by Congress and the National Park Service over the last decade. A more in-depth description of these mandates can be found below:

1. Retirement Plan Conversion

The retirement plan for federal employees was converted from the Civil Service Retirement System (CSRS) to the Federal Employees Retirement System (FERS) so that all employees new to the park service in 1980 or later became part of the FERS system.

Approximately 15-20% of a CSRS employee's salary is contributed toward retirement, in contrast to 25-50% for a FERS employee. Therefore, as CSRS employees leave the park and are replaced by FERS employees, benefits costs increase. Between 1990 and 2000, the number of CSRS employees declined by 63% (53 to 23) as the permanent staff increased by 50% (86 to 123). The resulting increase in benefit cost for the National Lakeshore was 72% for the ten-year period 1990-2000.



2. Professionalization Initiatives

Staff professionalization programs have been instituted in the National Park Service as compensation for employees for their increased levels of responsibility and complexity. For example, Rangers Careers was begun in the early 1990s to add more resource protection and law enforcement responsibilities for ranger positions. Grade levels and salaries for law enforcement rangers increased. Necessarily, supervisor grade levels and salaries also increased.

As a result of the Ranger professionalization, a plan called the 6C Retirement Program was instituted at the same time as the Rangers Careers to reduce the required service time to full retirement from 30 years to 20 years for firefighters and law enforcement rangers. The park's base budget increased sharply in 1996 in partial support for these three initiatives to meet the directed mandates. Resource, information technology, and engineer careers also were professionalized in fiscal year 2000, but with no supporting budget increases. A base

increase to the park's budget in 1996 only partially met the financial demand that these programs created.

3. National Park Service Reorganization

In the mid 1990s, several national and regional financial and human resource responsibilities were delegated to the park, otherwise known as the field level. To handle this increased load, the National Lakeshore park administrative staff has grown from 11 to 13 over the past five years, although no budget increases were received to support this reorganization. Due to increased responsibilities, administrative grades have increased an average of \$2,300 per position, also driving costs upward. The National Lakeshore administrative staff provides contracting support to seven other park sites.

As a result of these increasing financial demands, the National Lakeshore continues to consider outsourcing opportunities as a means to control personnel expenditures. Two major aspects must be considered, however: In-park project management needs associated with outsourcing and the possibility that in terms of total resource expenditure, the activity may be performed more cost-effectively by National Lakeshore staff.

Visitor Experience and Enjoyment

Indiana Dunes National Lakeshore receives more than 1,840,000 visitors per year. Whether they come to enjoy the beach, participate in formal interpretive programs to learn about the bogs and dunes, or visit the historic Chellberg farm, their experience is enhanced through the level of safety and services provided by the National Lakeshore.

Visitor Safety Services

Visitor Safety Services expenditures comprised over 42% of the \$2.87 million spent on Visitor Experience and Enjoyment in fiscal year 2000, yet still remains the program with the highest deficit within Visitor Experience and Enjoyment (42% when stated as a percentage of available dollars). The visitor safety services provided include search and rescue, investigations, and patrols of park boundaries and high traffic areas. One such area is Dunewood Campground; the campground has become a persistent source of incidents requiring a law enforcement presence.

The visitor protection division also coordinates community programs such as the Water Safety Exposition and Drug Awareness and Resistance Education (DARE).



The challenges facing Visitor Safety Services at National Lakeshore involve the uneven and complex boundaries of the park. Boundaries stretch over 15,000 acres, surrounding the 2,182 acres of the Indiana Dunes State Park, managed by the Indiana Department of Natural Resources, and involving co-jurisdictional areas with bordering communities. High levels of trespasses and crimes follow from the high level of visitation. Forty-eight felonies and 974 misdemeanors were investigated at the National Lakeshore in fiscal year 2000.

Fee Collection

Groups desiring to use the park for special purposes must apply for a permit and are assessed a fee to cover the cost of processing and monitoring, or other services necessary for the activity.

A deficit of \$81,161 in fiscal year 2000 exists in the special-use fee collections program at National Lakeshore. The park plans to reassess the current nominal fee charge for special use permits to ensure that it adequately covers the cost of services provided.

Visitor Experience and Enjoyment Programs

- Interpretation
 - Interpretive Media
 - Interpretive Programs
- Environmental Education
- Cooperating Association Coordination
- Fee Collection
- Concessions
- Visitor Safety Services
- Management and Administration
 - Interpretation Mgt & Admin
 - Visitor Protection Mgt & Admin

Interpretation and Education

Interpretation and Education services comprised nearly 37% of Visitor Experience and Enjoyment expenditures in fiscal year 2000. Interpretation is provided through formal interpretive programs as well as informal roving interpretation on the beaches and trails, environmental education, and off-site education programs. Investment in a report on historic furnishings and implementation of its findings would enhance the Chellberg Farm operation.

Interpretive waysides and accompanying brochures provide information about the historic and natural resources, what visitors can do to protect them, and precautions visitors should take to avoid potential hazards. Additional investment is needed in new and replacement waysides to support this operation.

A visitor center and contact station with bookstore are also operated in conjunction with Eastern National, a cooperating association. Volunteers cover many of the interpretive operations; the interpretation division logged 11,517 hours of volunteer time in fiscal year 2000.

In partnership with the Porter County Convention, Recreation and Visitor Commission, the park is planning a new, jointly-operated visitor center that is expected to open in the spring of 2003. Construction of the facility is through grants obtained by the Commission. The National Lakeshore is seeking additional funding to cover lease and interior exhibit costs.



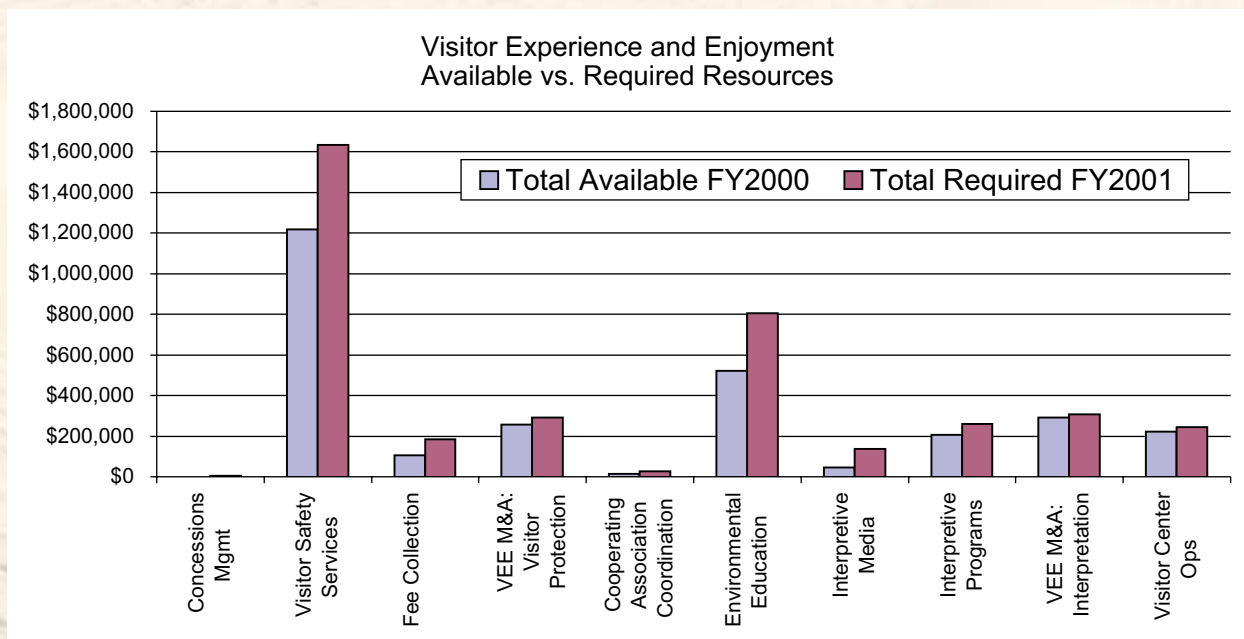
Environmental Education represents the second highest deficit in the Visitor Experience and Enjoyment functional area. Approximately 40,000 children attend park education programs each year. While these programs are presented at locations throughout the entire park, the greatest concentration of programs occurs at the Paul H. Douglas Center for Environmental Education or at the Indiana Dunes Environmental Learning Center.

Partnerships are critical to the success of programs at both locations. Education programs at the Learning Center, a residential facility, are developed and presented in a partnership between the National Park Service and the private, non-profit Learning Center. The facilities, while owned by the NPS and located within the National Lakeshore, are operated by the Learning Center's professional staff and student interns. At the Paul H. Douglas Center, programs are presented by both NPS staff and education staff from another partner organization, the Lake County Solid Waste Management District.



In FY 2000, expenditures for Visitor Experience and Enjoyment totaled \$3,869,238, and 47.24 full-time equivalency (FTE) staff were used. These amounts represent 33% of the park's expenditures that year. For the programs in this functional area to operate at a satisfactory level and meet

National Park Service operational standards, an additional 10.33 FTE and \$1,011,712 would be necessary. Environmental Education and Visitor Safety Services are priority targets for additional funding. Together they represent nearly 45% of the total need for Visitor Experience and Enjoyment that remains unfunded.



Maintenance

Maintenance activities are designed to protect and prolong the life of park assets. These assets include capital improvements via major repairs to equipment, facilities, or structures, as well as construction of new park assets. Some of the assets that are maintained through this program include 215 vehicles, 103 buildings, 45 miles of trails, and 36 parking areas. A comprehensive list of lakeshore physical assets and infrastructure can be found in the park inventory portion of this document.

Maintenance Programs

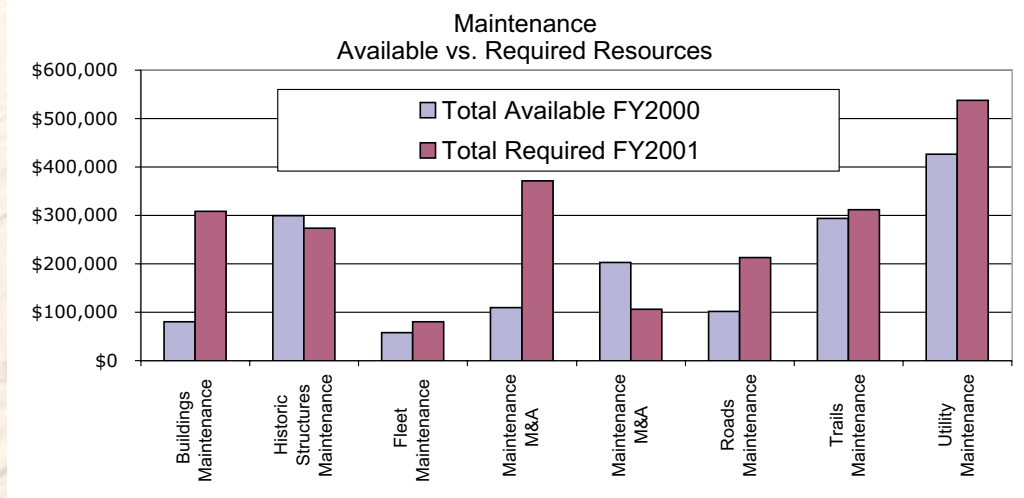
Buildings Maintenance
 Historical Structure Maintenance
 Fleet and Transportation Maintenance
 Maintenance Management and
 Administration Planning
 Roads Maintenance
 Trails Maintenance
 Utility Maintenance

Maintenance activities at the National Lakeshore ensure that all operations meet and comply with U.S. public health codes, the Americans with Disabilities Act, the Indiana Department of Transportation and Environmental Protection Agency regulations, and any other applicable federal, state, and local regulations. In addition, all activities conform to NPS regulations and Director's Orders. Such activities include cyclic repairs, restoration of modern and historic structures, and maintenance of water treatment systems throughout the National Lakeshore.

Future park roads and parking lot expansion and development will connect hiking and biking trail systems, align existing park roads with new ones, provide access to parking lots, and coordinate new site development.

The National Lakeshore General Management Plan (GMP) identifies future acquisition of Highway 12 from the east gate of Bethlehem Steel to Highway 20 as a designated scenic road. The

GMP also identifies additional trails and other visitor-use facilities anticipated for development in the next ten years. Maintenance of new facilities or infrastructure would involve increases in previously stated required operational resources.





In fiscal year 2000, maintenance expenditures totaled approximately \$1,566,282 and labor consisted of 14.79 FTE. Expenditures and labor were allocated to each of the eight programs in the maintenance functional area. Three maintenance programs now under-funded include buildings maintenance (74% under-funded), roads maintenance (52% under-funded), and utilities maintenance (21% under-funded). The historic structures operation currently has little or no FTE and receives little or no funding.

If the National Lakeshore intends to bring buildings, historic structures, fleet, roads, trails, and utilities up to national standards, additional resources must be provided to these programs as well as those in facility operations. The analysis of this program area indicates a shortfall of 7.39 FTE and \$631,922.

Buildings Maintenance

The buildings maintenance program oversees all major repairs and reconstruction projects for all National Lakeshore facilities. Building maintenance activities include major in-house day labor projects, contracted rehabilitation work, stabilization of facilities in poor condition, and boarding up and securing vacant structures waiting for demolition. In addition, overnight facilities must provide safe accommodations and meet public health and sanitation and life-safety code requirements.

The buildings maintenance program currently operates with a 3.23 FTE and \$228,371 funding shortfall. Lack of funding means that some activities get delayed until reaching emergency status. For example, structures targeted for demolition are often not properly secured until they become hazardous or begin to collapse.

Roads Maintenance

Professional National Lakeshore staff, Federal Highway engineers, and private engineering firms perform major roadway designs and alterations to improve and maintain road safety. Fifty-eight miles of roads and parking areas are located and dispersed through dunes, wetlands, and other types of terrain. A high percentage of these roads and lots are classified as in "poor" condition by the Federal Highway Administration. Approximately half of the 58 miles of roads and lots exist in a non-static environment. This means that they require unpredictable and unexpected repairs to correct hazardous conditions.

The roads maintenance program operates with a .75 FTE and \$111,064 funding shortfall. If inadequate funding continues, road quality will decrease exponentially. In addition, by legislative decree, the National Lakeshore has become responsible for major repairs to roads that are within park boundaries but not owned by the National Lakeshore, adding to the program's responsibilities.



Utility Maintenance

The utilities maintenance program entails on-going activities to maintain and upgrade major utility systems that support National Lakeshore infrastructure and critical services such as electrical systems, lighting systems, water and wastewater systems, fire suppression systems, heating, ventilating and air-conditioning systems, and technological improvements. All utilities maintenance is performed in accordance with all applicable federal and state regulations.

The utilities maintenance program operates with a 1.68 FTE and \$111,719 funding shortfall. Daily utility operations would enable this program to perform preventive maintenance.



Management and Administration

The Management and Administration program provides leadership and support in order for the park to operate as efficiently as possible and according to its mission. The location of Indiana Dunes National Lakeshore in a highly developed area generates the need for extensive communication and partnerships with the public regarding controversial issues, including air and water quality issues, deer management, and land use, such as the Reservation of Use program. The park staff and leadership work closely with local, state and federal agencies and activist groups, including 11 separate municipalities, three county governments, regional and state organizations, and federal environmental, transportation and regulatory offices.

Management and Administration Programs

- General Management
- Park Leadership
 - Human Resources
 - Reservations of Use
- General Administration
 - Contracts/Procurement
 - Volunteers in Parks
- Financial Management
- Communications
 - IT, Telephones, and Mail
 - Radio and Dispatch
- External Affairs
 - Domestic
 - International

Park Leadership and External Affairs

The National Park Service is viewed as a leader in environmental issues. The location of the National Lakeshore necessitates monitoring and communicating environmental issues.



The Indiana Dunes National Lakeshore surrounds the Indiana Dunes State Park, which creates extensive inter-workings between the two organizations. The park's jagged boundaries and co-jurisdictions with the state park and abutting communities can cause confusion. Developing and maintaining the National Lakeshore's identity and partnerships are vital, both in terms of protecting the park's resources and in securing funding. Many visitors use the park as strictly a recreational area and do not understand or respect the delicate ecosystems that need protection. Partnership efforts and the National Lakeshore's presence at community events and activist meetings can lead to better education and

response to issues such as air and water quality, resource protection, the impact of the park on the local community, and precautionary actions regarding fire suppression and water hazards.

International Affairs

The National Lakeshore has a "Sister Park", Kampinoski National Park, in Poland. A Memorandum of Cooperation established the Sister Park relationship on April 15, 1998. At the same time an Understanding between the NPS and the Board of Polish National Parks was also signed. Both parks have similar challenges in addressing location within close proximity of a large metropolitan area, exotic species control, dune formations, and hydrological issues. Both parks have exchanged representatives to work together



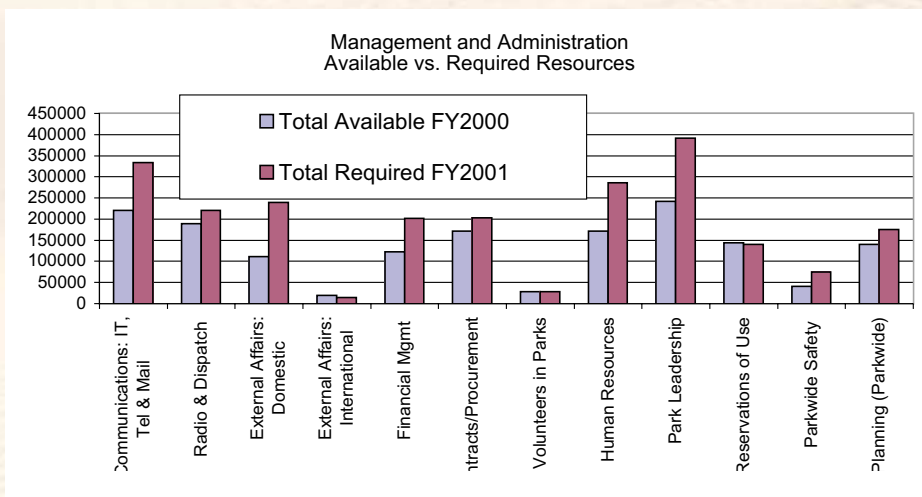
in mutually beneficial areas of environmental education, science, and natural resources management.

General Management and Administration and Communication

The National Lakeshore operates as a servicing center, providing human resource and contracting support to several other parks in the region. Human resource services are provided for 125 full-time employees, in addition to part-time and seasonal workers. The communications group provides 24-hour central switchboard/dispatch operations as well as information technology support for 180 workstations. The Management and Administration program is also responsible for financial management (over \$8M in park-wide expenditures in fiscal year 2000).



Approximately 18% of the expenditures of the park exist in park-wide Management and Administration. In order to operate most effectively, an additional 7.97 FTE and \$717,704 are needed. Approximately 39% of the under-funded need for Management and Administration falls in the areas of park leadership (1.60 FTE and \$149,313) and domestic External Affairs (1.53 FTE and \$128,681).



Resource Protection

Resource protection includes management of natural and cultural resources, information integration and analysis, and management of these programs. Urban expansion that occurred in the area prior to the park's establishment has led to heavy pressure on park resources. Indiana Dunes National Lakeshore must meet state and federal monitoring requirements, rehabilitate degraded resources, and mitigate future resource damage. Resource Protection programs amount to 40% of the total resources required for operation of the National Lakeshore. Actual expenditures for fiscal year 2000, however, show that only 60% of that need is currently being met.

Resource Protection (RP) Programs

- Cultural Resource Management
 - Architectural
 - Historical
- Natural Resource Management
 - Wildlife
 - Vegetation/Restoration
 - Environmental Monitoring
- Fire Management
- Information Integration and Analysis
- RP Management & Administration

Vegetation Management and Restoration

Over 10% of the entire park's FTE deficit occurs in the Vegetation and Restoration subprogram of Natural Resource Management. The mission statement charges the park with "the preservation of the park's unique flora, fauna, and physiographic conditions and its historic sites and structures." At the National Lakeshore, this requires rehabilitation of a variety of ecosystems that have been affected by urbanization of the area. These include 118 acres of prairie land turned agricultural fields, wetlands that have been drained, beaches that are eroded by adjoining developments, and home sites where grounds were plowed for foundations and farming. Government lands are increasingly important as refuges for sensitive species, particularly in urban areas, so vegetation management at the National Lakeshore also includes assessment of rare botanical species, and development and implementation of recovery plans.

Environmental Monitoring

Vegetation is affected by the quality of the air and water in the area. Since the National Lakeshore provides many beaches for visitor enjoyment, environmental monitoring and protection are an important activity in the park. The state of Indiana and the Chicago area have not attained EPA standards regarding air and water quality, so the park tests for air quality, water quality (E. coli) and also informs the public of the hazards of the beach on particular days when bacteria counts are particularly high and potentially hazardous.



Invasive Species Control

Invasive, non-native plant species transplanted into home sites for landscaping and agricultural purposes are rapidly diminishing the quality and stability of the microenvironments that the park was established to protect. Purple Loosestrife, for example, invades an area, destroys native cover for wildlife, and crowds out crucial native vegetation and animals dependent on the vegetation.

The problem is so pervasive that no resource management action proceeds without some form of



invasive species control as a preliminary step. Depending on the species, eradication techniques include hand pulling, mechanical cutting, and herbicide application. Control also involves inventory, monitoring, and mapping. Solving this problem requires a concerted effort among resource management, Biological Resource Division, interpretation, maintenance, and fire protection staff. Volunteers also provided more than 4,000 hours in fiscal year 2000, mainly in invasive species control actions and wetland and prairie restoration.

Wildlife

Indiana Dunes National Lakeshore is the only national park to have the Karner Blue butterfly--a federally listed endangered species--within its boundaries. Protection of the Karner Blue butterfly thus becomes a significant operation at National Lakeshore, which contains the third largest population of Karner Blues in the world. The decline of the Karner Blue results from the loss of the wild lupine plant on which the Karner Blue caterpillar feeds exclusively. Efforts are underway to improve the habitat for Karner Blues within the park through prescription fires that are ignited and controlled by park personnel. Such fires prevent excessive shading of the area due to overgrowth of oak, sassafras, and aspen trees, and stimulate the growth of wild lupine.



Fire Management

The Fire Management program personnel suppress all wildland fires in and near park lands, and work with other park personnel to replicate the natural role of fire in the management of the park's ecosystems. Area residents benefit from prescribed fires because fuel from dead plant material that has built up over the years is reduced under controlled conditions, thereby lessening the threat to their homes posed by wildfires.



Wildland fire suppression is a particular challenge at Indiana Dunes National Lakeshore. Many residential, business, and government structures immediately abut or are scattered throughout parklands. Multiple, heavily trafficked rail lines and two major U.S. highways run through or adjacent to the park creating numerous points of ignition. The park has varied topography and ecosystems, with significant areas host to federally endangered species. While a number of rural, volunteer, or

paid structural fire departments serve the National Lakeshore, the nearest cadre of trained and specially equipped wildland firefighters is hours away. Due to the urban nature of the region there are few blocks of woodlands that need wildland fire protection. Natural areas with this type of expertise are in the southern part of Indiana, Northern Wisconsin, and Michigan. Park fire staff members also actively support similar efforts on a local, regional and national level. The park fire team is mobile and ready to respond on both a local, regional, or national level to assist other areas in their fire suppression operations.

Recent stricter standards regarding fire activities in national parks have led to a great need in the park for additional fire staff – either collateral duty or full-time. The \$800,463 and 15.72 FTE underfunded needs for fire management represent 15% of the park-wide dollar deficit and 22% of the -

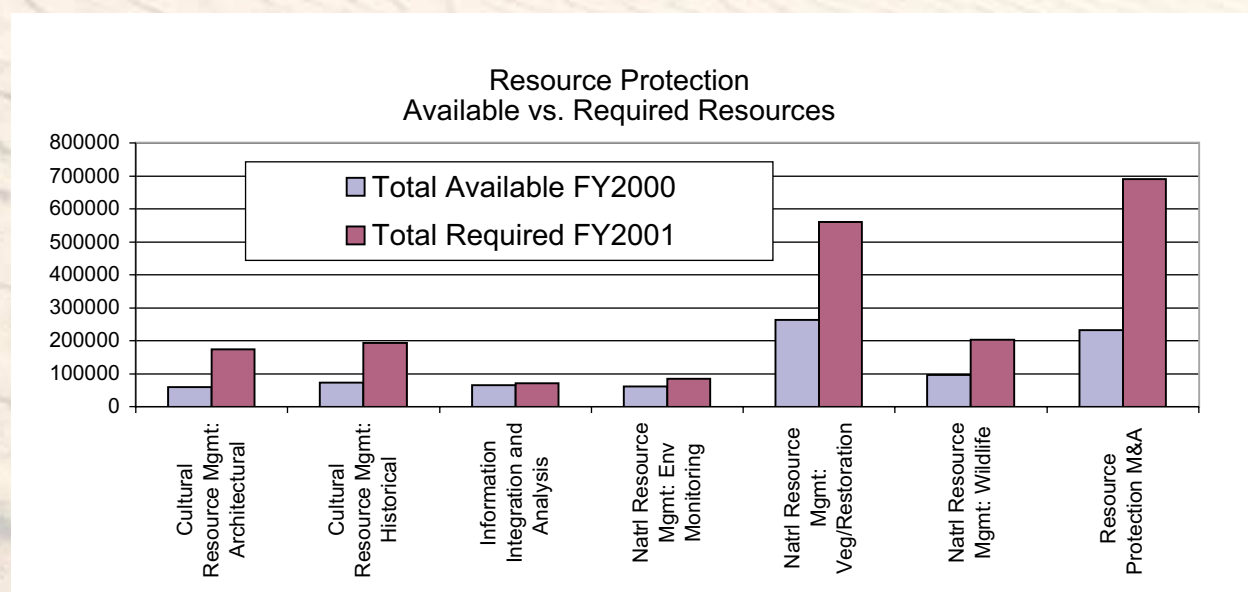


park-wide FTE deficit. Although the fire activities are integral to park operations, the budget for full-time firefighters and overtime pay for collateral duty firefighters is determined and provided by the federal Fire Program (Firepro) money, which is not a part of the National Lakeshore base funding and over which the park has little control. Funds added to the wildland fire program nationally have helped to alleviate this shortfall in fiscal year 2001 by providing an additional 7.1 FTE and \$496,470 to the fire operation.

While this funding is not part of the park's base fund it enhances the National Lakeshore ability to protect resources.

Cultural Resources

To comply with the Historic Preservation Act established by Congress, any building older than 50 years must be assessed for historical significance and all findings documented. At the time Indiana Dunes National Lakeshore was established in 1966, there were more than 800 structures within the park. More than 300 structures currently exist within the park and need to be assessed, documented, and either subsequently maintained or demolished. If demolished, then the resulting vacant site must be restored to prevent invasion by nonnative plant species. The management of architectural and historical resources represents nearly 18% of the resource protection deficit (not including fire management).





Resource Protection Management and Administration

The resource management division spends considerable time compiling data and proposals to pursue grant funding. In addition, Student Conservation Association and Youth Conservation Corps workers help with National Lakeshore operations each year and foster park stewardship in the surrounding communities.

Resource Protection alone represents 39.8% of the entire park deficit, although it comprised only 15.3% of park expenditures in fiscal year 2000. Funding is difficult to obtain because the results of resource management are difficult to measure, often invisible to the visiting public, and results are often achieved over years of incremental improvements.

Facility Operations

Facility Operations activities at Indiana Dunes National Lakeshore are performed by the maintenance division. Facility operations entail the day-to-day preservation and minor repairs involved with protecting natural and cultural resources. National Lakeshore facilities include a visitor center, learning center, campground, 56 historic structures, 103 buildings and structures, 45 miles of trails, and 60.45 paved miles of roads.

Facility operations ensure that all historic structures, buildings, trails, and roads are in a safe and functional state for staff and visitor use. This involves daily monitoring and minor repairs.

Facility Operations Programs

- Campground Operations
- Fleet and Transportation Operations
- Ground Operations
- Buildings Operations
 - Historical Structures Operations
- Janitorial Operations
- Roads Operations
- Facility Operations Management and Administration
- Trails Operations
- Utilities Operations

In fiscal year 2000, facility operations expenditures totaled approximately \$1,360,990, and labor consisted of 26.82 FTE. Expenditures and labor were allocated to each of the ten programs in facility operations. Three facility operations programs that are greatly under-funded are buildings operations (70% under-funded), trails operations (75% under-funded), and utility operations (41% under-funded).



The National Lakeshore needs an additional 11.99 FTE and \$773,691 across all ten facility operations programs in order to maintain facility and infrastructure integrity and avoid premature, unnecessary, and costly maintenance activities. The park continues to grow and develop; facility operations programs also require proportionate additional funding.

Buildings Operations

This program provides for safe and functional structures. However, due to a 2.5 FTE and \$125,098 shortfall, the National Lakeshore will not be able to service adequately each facility daily to avoid costly, unnecessary, or premature major repairs.

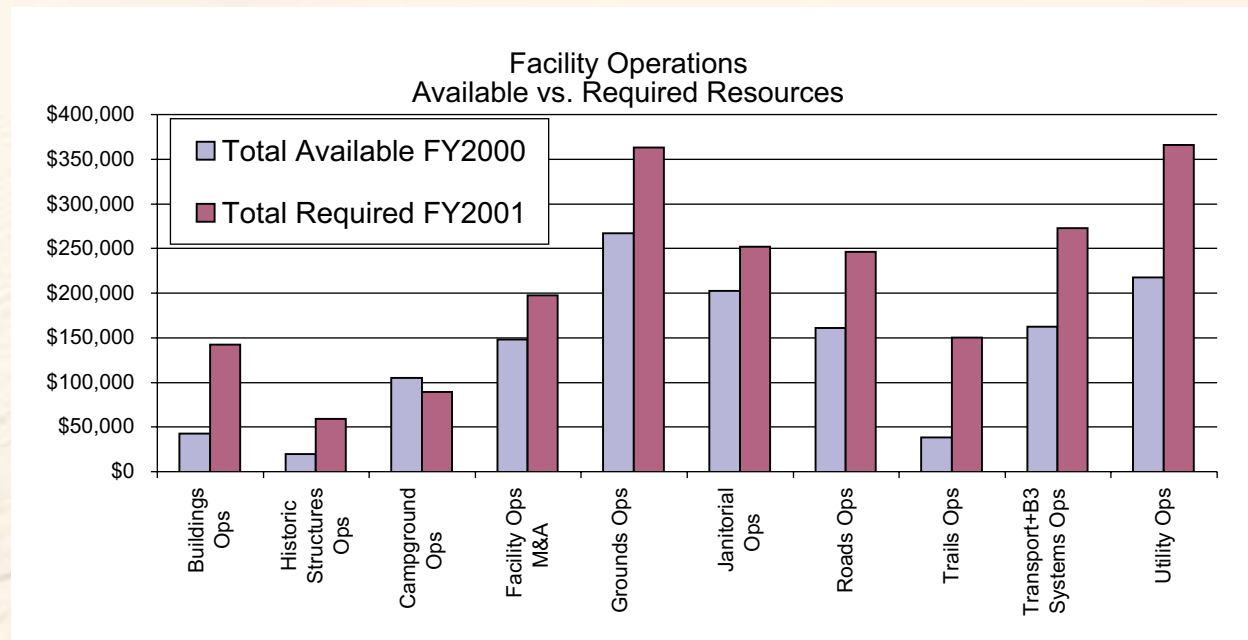
Trails Operations

Through this program National Lakeshore trails are inspected to minimize damage both to the trails and surrounding wildlife and vegetation. Trails, boardwalks, steps, water bars, drainage structures, and trail bridges are repaired in order to provide safe passage for visitors. Trails are kept in good functional order by maintaining program bulletin boards, trailhead kiosks, bollards, gate trail markers, trimming back vegetation and overhead branches, removing debris, and collecting litter. Due to a 2.2 FTE and \$111,988 funding shortfall, the National Lakeshore cannot properly patrol and maintain the 45 miles of trails that currently exist.



Utility Operations

Utility operations deals with daily functions of all major utility systems within the National Lakeshore. These include electrical distribution panels, lighting, fire suppression, heating, ventilating, and air conditioning, and 21 water and wastewater systems. All utility systems throughout the National Lakeshore should be inspected and monitored regularly to identify necessary repairs. However, due to a 2.22 FTE and \$148,581 funding shortfall, the National Lakeshore has been unable to adhere to a regular schedule. The relationship between this and the buildings operations programs exemplifies the lack of adequate funding, resulting in major repairs or reconstruction.



Operational Priorities

This chart describes the top appropriated funding priorities for Indiana Dunes National Lakeshore. The budget requests in the National Park Service's Operations Formulation System (OFS) reflect the additional funding and staffing needed to accomplish the most pressing objectives outlined in this plan. The total amount of the operational increase requested by the National Lakeshore for fiscal year 2001 was \$1,356,000, which includes funds for an additional 19.5 FTE. This represents only a portion of the total operational dollars and FTE required for the National Lakeshore, as identified on the Financial Summary spreadsheet.

| | |
|---|--|
| Control Non-Native Species and Improve T&E Species Habitat | <p>This request would allow for restoration activities on 6,000 acres of parklands and improve the habitats of federal- and state-listed populations of threatened and endangered (T&E) species. Fifty percent of the park's lands are moderately to severely degraded due to past land use and invasive non-native species. Recent monitoring of 80 state-listed plant species in the park shows that 5% no longer exist and 49% are declining. Exotic species and excess trees/brush would be removed within 300 acres annually. Native vegetation would be planted using plant material and seed collected within the park's boundary and grown in park-based greenhouses. Long-term results would provide exotic vegetation containment and T&E species improvement in previously treated and additional areas, development and implementation of recovery plans for state-listed plant species, and recovery of wetland and upland habitat to reflect the diversity of vegetation present prior to settlement.</p> |
| FTE: 5.4 Funding: \$311,000 | |
| Restore, Preserve and Protect Historic Structures | <p>This request would provide restoration and preservation maintenance for 31 identified historic structures and five cultural landscapes, and protection for more than 66,500 museum objects. Five structures are listed in poor condition and are in danger of losing historic fabric. Fifteen structures listed in good condition and 11 in stable condition would receive recurring preservation maintenance. Of these, the Bailly Homestead, a National Historic Landmark, is listed as a threatened resource, with one building at risk of imminent collapse. Deteriorating fabric would be replaced/repared and preservation schedules prepared for each structure. Coordination with NPS partners would assist in preserving six structures in an existing National Register District. The museum collection currently meets 272 professional standards for preservation and protection out of 476 applicable standards. The professional standards deficiencies would be overcome through cataloging and improving housekeeping and storage conditions.</p> |
| FTE: 3 Funding: \$294,000 | |
| Improve Visitor Safety and Protect Fragile Dune Environment | <p>This request would provide improvements to the park's water safety, resource management, and environmental education programs. Quicker responses to water-related emergencies on 22 miles of shoreline, enforcement of the recent personal watercraft ban, and a public educational aspect to the hazards of Lake Michigan would be provided. Litter removal and custodial care to a bathhouse, restrooms, parking lots, and picnic areas would be increased 100% (to twice daily). Beach sanitation would be enhanced, providing faster removal of dead fish, debris, and other wastes. This would prevent litter build-up on fragile foredune areas, protecting 800 acres of dune habitat from degradation and discouraging additional littering.</p> |
| FTE: 5.1 Funding: \$293,000 | |

GPRA Analysis

GPRA Long-Term Goals

I Preserve Park Resources

- IA Natural and cultural resources and associated values are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.
- IB The National Park Service contributes to knowledge about natural and cultural resources and associated values: management decisions about resources and visitors are based on adequate scholarly and scientific information.

II Provide for the Public Enjoyment and Visitor Experience of Parks

- IIA Visitors safely enjoy and are satisfied with the availability, accessibility, diversity and quality of park facilities, services, and appropriate recreational opportunities.
- IIB Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

III Strengthen and Preserve Natural and Cultural Resources and Enhance Recreational Opportunities Managed by Partners

- IIIA Natural and cultural resources are conserved through formal partnership programs.
- IIIB Through partnerships with other federal, state and local agencies, and nonprofit organizations, a nationwide system of parks, open space, rivers, and trails provides educational, recreational and conservation benefits for the American people.
- IIIC Assisted through federal funds and programs, the protection of recreational opportunities is achieved through formal mechanisms to ensure continued access for public recreational use.

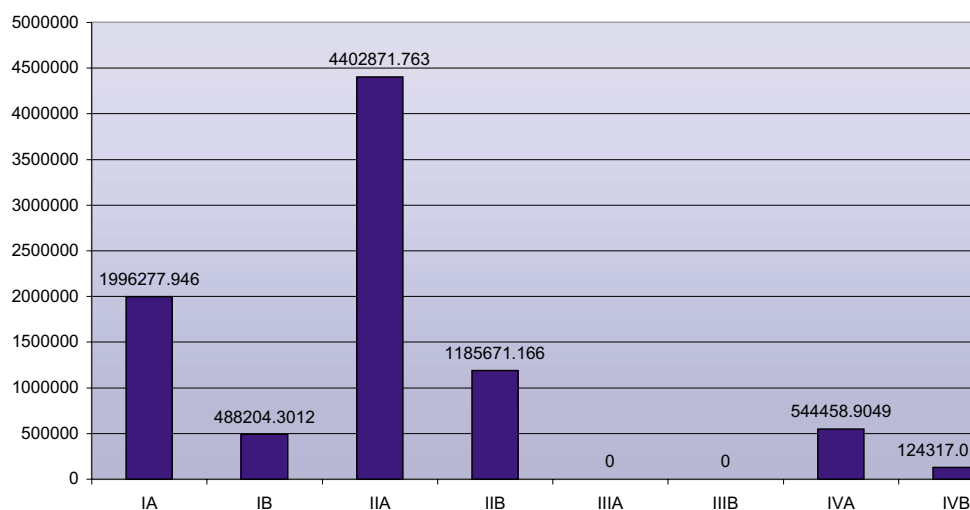
IV Ensure Organizational Effectiveness

- IVA The National Park Service uses current management practices, systems, and technologies to accomplish its mission.
- IVB The National Park Service increases its managerial capabilities through initiatives and support from other agencies.

The Government Performance Review Act of 1997 (GPRA) is one of the most recent and comprehensive of a number of laws and executive orders directing federal agencies to join the "performance management revolution" already embraced by private industry and many local, state, and international governments. It has the potential to affect park and program operations profoundly.

GPRA divides park operations into four main Service-wide goals, shown above. For the purpose of this plan, budget dollars for each program and subprogram were allocated to each of the nine Service-wide sub goals. The park breakdown of budget dollars spent on each goal is shown below.

Indiana Dunes National Lakeshore GPRA Goal Expenditures



Investments

Annually, national parks enter and update a list of needs in the Project Management Information System database for consideration for funding. Many projects, although integral to the operations of the park, remain unfunded from year to year. The current backlog of unfunded investments at the National Lakeshore is \$63,672,371. Below is a list of investments the park has determined to be top priorities.

1. Municipal Water System for Fire Suppression (Phase I) Unfunded Cost: \$650,0000

Phase I of this project would bring municipal water to connect the historic Bailly Homestead district, the Environmental Education Learning Center, and the historic Camp Good Fellow buildings. Buildings at the Bailly Homestead and Camp Good Fellow are currently without adequate fire protection. The present well-water system at the Indiana Dunes Environmental Learning Center will not provide adequate volume/pressure for extended structural fire suppression or needed expansion of facilities.

2. Environmental Impact Statement for White-Tailed Deer Management

Unfunded Cost: \$433,448

Studies are being conducted to determine the impact of the area deer population on other plant and animal populations. Additionally, criteria need to be established to determine the level of impact of an increasing deer population on approximately 113 species of birds considered regular nesters that depend on the preserved natural land, and 135 state-listed plant species. This is an issue of growing concern within NPS units around the nation, with the greatest controversy in urban areas.

Funding would allow the National Lakeshore to complete an Environmental Impact Statement (EIS). This EIS could serve as a model to demonstrate an effective and proactive method of managing overabundant wildlife, rather than the current model of reactive management.

3. Good Fellow Club Youth Camp Cultural Landscape Report Unfunded Cost: \$75,000

The Good Fellow Club Youth Camp, recognized as eligible for National Historic Landmark status, will become an environmental learning center. The development includes new construction adjacent to the core of the historic site and modifications to historic landscape features, such as roads within the camp. The Cultural Landscape Report will provide the necessary baseline research to guide management decisions. Failure to plan for the rehabilitation and maintenance of this site will result in the failure to meet the Secretary of Interior's Standards for Cultural Resource Management Activities. This project will also assist in preserving and protecting cultural resources outlined in the National Lakeshore's Strategic and Annual Performance Plan.

4. Restoration of Wetland Hydrology

Unfunded Cost: \$832,000

Prior to intensive settlement in Northwest Indiana, the Great Marsh, and associated wetlands covered approximately 60% (approximately 7,200 acres) of the area. Diverse habitats such as wet prairies, sedge meadows, swamp forests, and open water existed in several distinct watersheds. As housing and agriculture development encroached on the area, a majority of the wetlands was drained to provide drier lands.

The native wildlife and vegetation depend on the natural ecosystems, and often very specific habitats, for their existence. As long as the hydrological systems of the National Lakeshore remain in such a disturbed state, the continued decline of native habitats will continue. This project will restore wetland areas by eliminating manmade ditches, tile drains, and fill that obstructs wetland surface water flows. The project areas would be intensely field-mapped and surveyed to determine hydrological disturbances and find the best processes for restoration.

5. Exotic Plant Species Management

Unfunded Cost: \$342,600

Several aggressive exotic plant species currently threaten native habitats within the park. Among the highest priority for removal are garlic mustard, yellow and white sweet clover, purple loosestrife, and black locust, which pose the most serious threats to the ecosystem of the National Lakeshore. Because these species are so extensive, it could take a minimum of a seasonal six-person crew working throughout the growing season for at least four years to begin to control many of these species effectively.

6. Dunbar Avenue Site Development

Unfunded Cost: \$206,600

Currently, the popular Dunbar Avenue section of the Lake Michigan beach provides very limited parking and beach access. More than 75,500 people visit annually, but the Dunbar Beach Area has only one chemical toilet and no other sanitary facilities. Visitor services should comply with all Americans with Disabilities Act and United States Public Health Service requirements. This project would provide for construction of a permanent restroom facility, water/wastewater systems, paved parking, and solar-powered lighting.

7. Safe Access to Pinhook Bog

Unfunded Cost: \$269,280

Pinhook Bog is a National Natural Landmark currently accessible only by ranger-guided tour groups. Parking is limited to two vehicles and provides no clear line of sight of traffic when entering and leaving the parking area. This project would provide a 15-car parking lot providing a clear line of sight and would eliminate hazardous conditions for visiting groups. The floating boardwalk also will be relocated to reduce the impact on the vegetation as recommended by research scientists from USGS, Biological Research Division.

8. Municipal Water System for Fire Suppression (Phase II)

Unfunded Cost: \$650,000

Phase I of this project would bring municipal water supply lines to connect the historic Bailly Homestead district, the Environmental Education Learning Center, and the historic Camp Good Fellow buildings

(see Investment Need #1). Phase II would extend the water main to the park headquarters facilities, Bailly Visitor Contact Station, Bailly Picnic area restrooms, and the historic Chellberg Farm district. The total Phase I and Phase II water main extension exceeds 2.7 miles and would provide fire suppression as well as potable water for 21 historic buildings and 14 buildings used for administrative and support purposes.

9. Evaluation and Remediation of Hazardous Range Site

Unfunded Cost: \$239,687

The range site was used as a private gun range for more than 25 years before it was acquired by the NPS. A limited subsurface evaluation, performed in fiscal year 2000, showed lead contamination of nearly 1,500 times the reportable limit for Residential Closure Limits (RCL) and Industrial Closure Limits (ICL) for the Indiana Department of Environmental Management (IDEM). The evaluation also showed elevated arsenic levels 20 times the limit for RCL and twice the RCL for selenium in the adjacent wetlands. IDEM requires that a remediation plan be in place within one year and that cleanup work begin shortly thereafter, or the park will become subject to daily fines for non-compliance. This project will provide the information necessary to establish and implement a proper remediation plan.

10. Permanent Restrooms at Inland Marsh

Unfunded Cost: \$206,448

Inland Marsh is a popular year-round trail that receives more than 43,000 visitors annually, including school groups, cross-country skiers, hikers, and picnickers. Currently Inland Marsh has chemical toilets and no other sanitary facilities. This project would provide for safe and sanitary flush toilets, drinking fountains, and picnic facilities as recommended by the Regional U.S. Public Health Service office.

11. Ongoing Development of Camp Good Fellow and the Indiana Dunes Environmental Learning Center

| | |
|--|----------------------------|
| Preservation of Historic Structures | Unfunded Cost: \$ 60,000 |
| Phase 2 Second Cluster | Unfunded Cost: \$1,150,500 |
| Phase 3 Environmental Education Building | Unfunded Cost: \$3,217,304 |
| Phase 4 Restoration of Old Lodge | Unfunded Cost: \$3,853,076 |
| Rehabilitation and Preservation of Historic Structures | Unfunded Cost: \$ 522,000 |

The Environmental Learning Center provides an opportunity for youth to learn about the region's historical industrial development and the effect such development has had on the natural environment. The current facility is full to capacity and has an extensive waiting list. Completion of all phases of this project will result in the institution of a four-season, overnight, environmental education program with the opportunity to serve up to 25,000 additional children annually.

The preservation phase will protect the exterior fabric of the historic lodge to stem deterioration until reactivation. Not maintaining the structure would result in the failure to meet the Standards for Cultural Resource Management Activities as defined by NPS in 1985.

The first cluster of cabins has been constructed. The next two phases will build a second cluster of historic buildings and an environmental education building. As part of the fourth phase, the main lodge, which is a National Register Property, will be restored and transformed for modern use, without destroying the lodge's historic character.

Camp operations are expected to become self-sustaining, and the project provides potential for additional funding through contributions from its partners. The project will improve local community and corporate partnerships and create a constituency of local entities supportive of the park mission.

Financial Strategies

The Business Plan Initiative has documented a \$5,210,090 shortfall in the operational budget of the Indiana Dunes National Lakeshore and a \$63,672,371 Project Management Information System backlog. The \$5.2M operational deficit does not consider money that has since been received by the National Lakeshore for approximately 15 new fire personnel that were hired in fiscal year 2001.

Seeking increased Congressional appropriations is only one method of reducing the gap between funds currently available and funding that the National Lakeshore needs. Alternative, creative methods of improving the park's ability to meet its mission and operational standards are needed. A variety of financial and non-financial strategies appears below. Several represent actions already taken by the park to supplement its base budget, while others are forward-thinking strategies that could aid the park's financial situation in both the short and long term. The wide array of strategies represent the National Lakeshore's intention to increase operational efficiency, build additional capacity, expand partnership opportunities, increase volunteerism, increase revenue from fee collections, and attract additional quality staff.

Personnel and Resource Reallocation

- To meet part of the patrol deficit in the visitor protection division, the park has begun augmenting staff lifeguards using visitor assistants with lifeguard skills. These assistants roam the beaches educating swimmers on the dangers of Lake Michigan and monitoring activities, thus increasing the uniformed staff presence in the park while ensuring visitor safety.
- To meet a deficit in computer support, several park staff are being collaterally trained to provide common computer support for their divisions.

Partnerships

- Increase fundraising capabilities through partnership fundraising efforts;
- Expand existing participation in programs such as the Student Conservation Association, Youth Conservation Corps, AmeriCorps, and others that team youth with conservation-related project needs.

Fee Collection

- Lengthen fee collection seasons at sites where fees are collected and ensure that user fees for recreational activities support facility operations at those locations;
- Explore fee levels as they relate to actual costs for Special-Use Permits.

Additional Financial Strategies

- Aggressively pursue grant funding for less-than-permanent FTE shortfalls;
- Consider innovative programs such as state license plate sales for revenue enhancement;

- Investigate contracting for specialized services when the opportunity exists;
- Prioritize ad-hoc tasks and projects for better time-management;
- Use the Business Plan as the principal vehicle to communicate the park's financial and operational needs. Aggressively market, both internally and externally, the increased requirements set forth in the Business Plan.

Acknowledgements

This business plan is the result of an initiative undertaken through a creative public/private partnership between the National Park Service (NPS) and the National Parks Conservation Association (NPCA), with the generous support of the following philanthropies:

- Henry P. Kendall Foundation
- Walter and Elise Haas Fund
- Compton Foundation, Inc.
- Vira I. Heinz Endowment
- Roy A. Hunt Foundation
- Park Foundation, Inc.
- The David and Lucile Packard Foundation
- William and Flora Hewlett Foundation
- Anonymous Donors

This program placed graduate students from top business and public policy schools at 13 National Parks in the summer of 2001. The following graduate students contributed to this project at Indiana Dunes National Lakeshore:

Kristy Lehmann
H. John Heinz III, School of Public Policy and Management,
Carnegie Mellon University

Krista Tibbs
Fuqua School of Business,
Duke University

This business plan would not have been possible without the invaluable assistance and support of:

Dale Engquist
Superintendent, Indiana Dunes National Lakeshore

Garry Traynham
Assistant Superintendent, Indiana Dunes National Lakeshore

Christopher Light
Administrative Officer, Indiana Dunes National Lakeshore

Bruce Rowe
Interpretive Program Manager, Indiana Dunes National Lakeshore

Lisa R. Jones
Assistant Superintendent's Secretary, Indiana Dunes National Lakeshore

Phil Voorhees
Senior Director, Park Funding & Management, NPCA

Tom Dale
Accounting Operations Center, WASO

Tracy Fehl
Accounting Operations Center, WASO

For more information about the National Park Business Plan Initiative please contact:



Tom Dale
NPS Accounting Operations Center
2180 Fox Mill Road, Suite 201
Herndon, VA 12171
e-mail: Tom_Dale@nps.gov
Telephone: (703) 487-9316

